



ONYX1047- DIV .ST25.txt
SEQUENCE LISTING

<110> Shen, Yuguiao
Nye, Julie
Hermiston, Terry

<120> ADENOVIRUS E1B-55K SINGLE AMINO ACID MUTANT AND METHODS OF USE

<130> ONYX1047-DIV

<140> US 10/669,768

<141> 2003-09-24

<150> US 09/918,696

<151> 2001-07-30

<150> US 60/222,887

<151> 2000-08-03

<160> 52

<170> PatentIn version 3.1

<210> 1

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-051

<400> 1

gttattatga atgtacggtt tactggcccc

30

<210> 2

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-051; R240 MUTATION

<400> 2

ggggccagta aacgctacat tcataataac

30

<210> 3

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-052

<400> 3

gttttcctgg ccaatgccaa ccttatccta cac

33

<210> 4

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-052; T255A MUTATION

<400> 4

gtgtaggata aggttgcat tggccaggaa aac

33

<210> 5

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-053

<400> 5

ccaaccttat cctagccggt gtaagcttc

29

<210> 6

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-053; H260A MUTATION

<400> 6

gaagcttaca ccggctagga taaggttg

29

<210> 7

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-054

<400> 7

gggtttaaca ataccgccgt ggaagcctgg

30

<210> 8

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-054; C271A MUTATION

<400> 8

ccaggcttcc acggcgggtat tgttaaacc

30

<210> 9

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-056

<400> 9

cgatgtaagg gttgcgggct gtgcctttta c

31

<210> 10

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-056; R281A MUTATION

<400> 10

gtaaaaggca cagcccgcaa cccttacatc g

31

<210> 11

<211> 27

ONYX1047- DIV .ST25.txt

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-057

<400> 11

gtaagggttc gggcctgtgc cttttac

27

<210> 12

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-057; G282A MUTATION

<400> 12

gtaaaaggca caggcccgaa cccttac

27

<210> 13

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-058

<400> 13

gtaagggttc ggggctgttc cttttactgc tgctggaagg

40

<210> 14

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-058; A284A MUTATION

<400> 14

ccttcagca gcagtaaaag gaacagcccc gaacccttac

40

<210> 15

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-059

<400> 15

ggttcggggc tgtgccttat actgctgctg gaagggg

37

<210> 16

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-059; F285L MUTATION

<400> 16

ccccttcag cagcagtata aggcacagcc ccgaacc

37

<210> 17

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-060

<400> 17

gggctgtgcc ttttactgcg cctggaaggg ggtggtgtg

39

<210> 18

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-060; C288A MUTATION

<400> 18

cacaccaccc ccttcaggc gcagtaaaag gcacagccc

39

<210> 19

<211> 41
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-061
 <400> 19
 gctgtgcctt ttactgctgc ttaaggggg tggtgtgtcg c 41

<210> 20
 <211> 41
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-061; W289F MUTATION
 <400> 20
 gcgacacacc acccccttaa agcagcagta aaaggcacag c 41

<210> 21
 <211> 40
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-062
 <400> 21
 gctgtgcctt ttactgctgc gcgaaggggg tggtgtgtcg 40

<210> 22
 <211> 40
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-062; W289A MUTATION
 <400> 22
 cgacacacca cccccttcgc gcagcagtaa aaggcacagc 40

<210> 23
 <211> 22
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-063
 <400> 23
 ctgctgctgg gcgggggtgg tg 22

 <210> 24
 <211> 22
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-063; K290A MUTATION
 <400> 24
 caccaccccc gccagcagc ag 22

 <210> 25
 <211> 38
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-064
 <400> 25
 tggaagggg tggtgtgtgc cccaaaagc agggcttc 38

 <210> 26
 <211> 38
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-064; R295A MUTATION
 <400> 26
 gaagccctgc ttttgggggc acacaccacc cccttcca 38

ONYX1047- DIV .ST25.txt

<210> 27
 <211> 42
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-065
 <400> 27
 ggtggtgtgt cgccccgcaa gcagggttc aattaagaaa tg 42

<210> 28
 <211> 42
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-065; K297A MUTATION
 <400> 28
 catttcttaa ttgaagccct gcttgcgggg cgacacacca cc 42

<210> 29
 <211> 43
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-066
 <400> 29
 ccaaaagcag ggcttcaatt gcgaaatgcc tctttgaaag gtg 43

<210> 30
 <211> 43
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-066; K303A MUTATION
 <400> 30
 caccttcaa agaggcattt cgcaattgaa gccctgcttt tgg 43

<210> 31
 <211> 45
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-067
 <400> 31
 cttcaattaa gaaatgcctc ttgcaagggt gtaccttggg tatcc 45

<210> 32
 <211> 45
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-067; E308A MUTATION
 <400> 32
 ggatacccaa ggtacacctt gcaaagaggc atttcttaat tgaag 45

<210> 33
 <211> 47
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-068
 <400> 33
 tcaattaaga aatgcctctt tgaagcgtgt accttgggta tcctgtc 47

<210> 34
 <211> 47
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-068; R309A MUTATION
 <400> 34

ONYX1047- DIV .ST25.txt
gacaggatac ccaaggtaca cgcttcaaag aggcatttct taattga 47

<210> 35

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-069

<400> 35
taccttgggt atcctgtctg cgggtaactc caggggtgcg 39

<210> 36

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-069; E317A MUTATION

<400> 36
cgcaccctgg agttaccgc agacaggata cccaaggta 39

<210> 37

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-070

<400> 37
taccttgggt atcctgtctg aggctacctc caggggtccgc c 41

<210> 38

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-070; G318A* MUTATION

<220>

<221> misc_feature

<223> ONYX-070 had two amino acids changed: Gly 318 to Ala, and Asn 319 to Thr.

<400> 38

ggcggaccct ggaggtagcc tcagacagga tacccaaggt a

41

<210> 39

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-071

<400> 39

taccttgggt atcctgtctg aggctaactc caggggtgcgc c

41

<210> 40

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-071; G318A-N MUTATION

<400> 40

ggcgcaccct ggagttagcc tcagacagga tacccaaggt a

41

<210> 41

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-080

<400> 41

ctaagatatt gcttgagccg gcgagcatgt ccaaggtgaa c

41

<210> 42

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-080; E421A MUTATION

<400> 42

gttcaccttg gacatgctcg ccgcctcaag caatatctta g

41

<210> 43

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-081

<400> 43

gagcccgaga gcatgtccgc ggtgaacctg aacgggg

37

<210> 44

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-081; K425 A MUTATION

<400> 44

ccccgttcag gttcaccgcg gacatgctct cgggctc

37

<210> 45

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-082

<400> 45

gaacctgaac ggggtgtttg ccatgaccat gaagatctgg

40

<210> 46

<211> 40

ONYX1047- DIV .ST25.txt

<212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-082; D433A MUTATION
 <400> 46
 ccagatcttc atgggtcatgg caaacacccc gttcagggttc 40
 <210> 47
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-083
 <400> 47
 ccatgaagat ctgggcggtg ctgaggtac 29
 <210> 48
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-083; K440A MUTATION
 <400> 48
 gtacctcagc accgcccaga tcttcatgg 29
 <210> 49
 <211> 26
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> ONYX-084
 <400> 49
 ggaaggtgct ggcgtacgat gagacc 26
 <210> 50

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-084; R443A MUTATION

<400> 50

ggtctcatcg tacgccagca ccttcc

26

<210> 51

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-085

<400> 51

ggaaggtgct gagggccgat gagacccgc

29

<210> 52

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> ONYX-085; Y444A MUTATION

<400> 52

gcgggtctca tcggccctca gcaccttcc

29